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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,838	04/19/2005	Thomas Bernhard Pabst	003D.0043.U1(US)	9148
29683	7590	05/03/2006	EXAMINER	
HARRINGTON & SMITH, LLP 4 RESEARCH DRIVE SHELTON, CT 06484-6212			DINH, PHUONG K	
			ART UNIT	PAPER NUMBER
			2839	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/532,838

Applicant(s)

PABST ET AL.

Examiner

Phuong KT Dinh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-11,14-17,19 and 20 is/are rejected.
- 7) ☒ Claim(s) 2,5,12,13,18 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Objections*

1. Claim 5 is objected to because of the following informalities:
2. Claim 5, "the top housing part" has no antecedent basis.
3. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 6, 7, 8, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Redmond (U. S. Patent 5,015,197) in view of Etters (U. S. Patent 6,010,359).

Regarding claim 1, Redmond, see figure 14, discloses connector arrangement between a cable 54 and a component of an electrical circuit, wherein the cable 54 has conductor regions stripped of insulation on only one side of its end being connected, comprising a housing 70 in which the end of the cable is clamped, the component comprising an uptake 78 (figure 14) for the housing 70, in which the housing 70 can be locked (see figure 5) and in which contact tracks are arranged, against which the stripped regions of the cable 54 are pressed when the housing 72 is in the final position thereof in the uptake 78, characterized in that the component is an electrical circuit

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board 100 and the uptake forms a bracket, which is attached to the circuit board 100 above an arrangement of conductive tracks and the housing is guided laterally and perpendicularly with respect to the circuit board 100. Redmond discloses the claimed invention except for a flat flexible cable and elastic pressure means. Etters discloses a flat flexible cable at 12 with exposed conductors at 44 and elastic pressure means 46 (figure 8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Redmond the flat flexible cable and elastic means as taught by Etters so as to provide for resiliently biasing the signal conductor outwardly. Basically the rejection involves use of Redmond receiver 78, etc. with Etters type connector 16.

Regarding claim 8, 17, Regarding claim 1, Redmond discloses connector arrangement between a cable 54 and a component of an electrical circuit, wherein the cable 54 has conductor regions stripped of insulation on only one side of its end being connected, comprising first housing at 70 and a second housing at 78 in which the end of the cable is clamped, the component comprising an uptake 78 (figure 14) for the housing 70, in which the housings 70, 78 can be locked (see figure 5) and in which contact tracks are arranged, against which the stripped regions of the cable 54 are pressed when the housing 72 is in the final position thereof in the uptake 78, characterized in that the component is an electrical circuit board 100 and the uptake forms a bracket, which is attached to the circuit board 100 above an arrangement of conductive tracks and the housing is guided laterally and perpendicularly with respect to the circuit board 100. Redmond discloses the claimed invention except for a flat flexible

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cable and elastic pressure means. Etters discloses a flat flexible cable at 12 and elastic pressure means 46 (figure 8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Redmond the flat flexible cable and elastic means as taught by Etters so as to provide for resiliently biasing the signal conductor outwardly.

Regarding claims 3, 14, Redmond discloses the claimed invention except for its end that is introduced into the flat flex cable has perforations on housing, in which a strain relief with retaining pins, which is hinged on the bottom housing part, engages in a lockable manner. Etters discloses the flex cable has perforations on housing, which a strain relief with retaining pins, which is hinged on the bottom part, engages in a lockable manner. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Redmond to provide the flex cable has perforations on housing, which a strain relief with retaining pins, which is hinged on the bottom part, engages in a lockable manner as taught by Etters so as to provide for better engagement.

Regarding claim 6, Redmond discloses the claimed invention except for the housing can be locked in place via catch arms in catch openings on the side walls of the bracket. Etters has catch arms 26i. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Redmond to form the bracket with opening for the catch arm latches as taught by Etters because these are necessary for latching.

Regarding claims 7, 16, 19, Redmond discloses on the top inner side of the uptake, there is constructed at least one ramp, which presses, through at least one opening in the top side of the housing, all or individual steel springs downward on the flat flex cable stripped of insulation.

6. Claims 4, 9-10, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Redmond (U. S. Patent 5,015,197) in view of Etters (U. S. Patent 6,010,359) and further in view of Robert (U. S. Patent 4,740,867).

Regarding claims 4, 9-10, 20, Redmond and Etters disclose the claimed invention except for the elastic element consists of one or more steel leaf springs and elastic element comprises a metal spring. Robert discloses a spring is metal spring and one or more steel leaf spring at 32. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Redmond and Etters to provide the elastic element comprises a metal spring and one or more steel leaf spring as taught by Robert so as to provide less bulky.

#### ***Allowable Subject Matter***

7. Claims 2, 5, 12-13, 18, 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

Applicant argues that Redmond and Etters do not disclose a connector arrangement between a flat flex cable and a component of an electrical circuit, wherein

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the flat flex cable has conductive regions stripped of insulation on only one side of its end being connected. The Examiner respectfully disagrees.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong KT Dinh whose telephone number is 571-272-2090. The examiner can normally be reached on 8 -5, 5 days a week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TC Patel can be reached on 571-272-2098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Phuong Dinh', with a stylized flourish at the end.

Phuong Dinh  
April 25, 2006

Phuong KT Dinh  
Primary Examiner  
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